

**TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A FILING UNDER 35 U.S.C. 371**

ATTORNEY'S DOCKET NUMBER

B1180/20044

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)

**107549886**INTERNATIONAL APPLICATION NO.  
PCT/EP2004/002774INTERNATIONAL FILING DATE  
March 17, 2004PRIORITY DATE CLAIMED  
March 17, 2003TITLE OF INVENTION  
METHODS AND DEVICES FOR SEPARATING PARTICLES IN A LIQUID FLOWAPPLICANT(S) FOR DO/EO/US  
Torsten MÜLLER, Thomasd SCHNELLE and Rolf HAGEDORN

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1.  This is a **FIRST** submission of items concerning a submission under 35 U.S.C. 371.
2.  This is a **SECOND** or **SUBSEQUENT** submission of items concerning a submission under 35 U.S.C. 371.
3.  This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.
4.  The US has been elected (Article 31).
5.  A copy of the International Application as filed (35 U.S.C. 371(c)(2))
  - a.  is attached hereto (required only if not communicated by the International Bureau).
  - b.  has been communicated by the International Bureau.
  - c.  is not required, as the application was filed in the United States Receiving Office (RO/US).
6.  An English language translation of the International Application as filed (35 U.S.C. 371(c)(2))
  - a.  is attached hereto.
  - b.  has been previously submitted under 35 U.S.C. 154(d)(4).
7.  Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
  - a.  are attached hereto (required only if not communicated by the International Bureau).
  - b.  have been communicated by the International Bureau.
  - c.  have not been made; however, the time limit for making such amendments has NOT expired.
  - d.  have not been made and will not be made.
8.  An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9.  An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10.  An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

**Items 11 to 20 below concern document(s) or information included:**

11.  An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12.  An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 & 3.31 is included.
13.  A preliminary amendment.
14.  An Application Data Sheet under 37 CFR 1.76.
15.  A substitute specification.
16.  A power of attorney and/or change of address letter.
17.  A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825.
18.  A second copy of the published International Application under 35 U.S.C. 154(d)(4).
19.  A second copy of the English language translation of the International Application under 35 U.S.C. 154(d)(4).
20.  Other items or information: Express Mail Transmittal form, cover sheet of WO2004/082840 and return receipt postcard

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

JC17 Rec'd PCT/PTO 16 SEP 2005

(Substitute) PTO-1390 (Rev. 07-2005)

Approved for use through 3/31/2007. OMB 0651-0021

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

|  |              |   |                             |                       |  |
|--|--------------|---|-----------------------------|-----------------------|--|
| U.S. APPLICATION NO. (If known, see 37 CFR 1.5)  |              | INTERNATIONAL APPLICATION NO.   |                             | ATTORNEY'S DOCKET NO. |  |
| 107549800  |              | PCT/EP2004/002774   |                             | B1180/20044           |  |
| The following fees have been submitted:  |              |   |                             |                       |  |
| 21. <input checked="" type="checkbox"/> Basic national fee ..... \$300   |              |   |                             |                       |  |
| 22. <input checked="" type="checkbox"/> Examination fee<br>If the written opinion prepared by ISA/US of the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) ..... \$0<br>All other situations ..... \$200  |              |   |                             |                       |  |
| 23. <input checked="" type="checkbox"/> Search fee<br>If the written opinion prepared by ISA/US of the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) ..... \$0<br>Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority ..... \$100<br>International Search Report prepared an ISA other than the US and provided to the Office or previously communicated to the US by the IB ..... \$400<br>All other situations ..... \$500 |              |   |                             |                       |  |
| TOTAL OF 21, 22 and 23 = \$ 900  |              |   |                             |                       |  |
| <input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing filed in an electronic medium) (37 CFR 1.492(j)).<br>The fee is \$250 for each additional 50 sheets of paper or fraction thereof.  |              |   |                             |                       |  |
| Total Sheets   | Extra Sheets | Number of each additional 50 or fraction thereof (round up to a whole number) | RATE                        |                       |  |
| - 100 =  | /50 =        |   | x \$250                     |                       |  |
| Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).  |              |   |                             |                       |  |
| CLAIMS   | NO. FILED    | NUMBER EXTRA  | RATE                        |                       |  |
| Total claims   | 33 - 20 =    | 13  | x \$50 \$ 650               |                       |  |
| Independent  | 2 - 3 =      | 0   | x \$200 \$                  |                       |  |
| MULTIPLE DEPENDENT CLAIM(S) (if applicable)  |              |   | + \$360 \$                  |                       |  |
| TOTAL OF ABOVE CALCULATIONS = \$1,550  |              |   |                             |                       |  |
| <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by ½.   |              |   |                             |                       |  |
| SUBTOTAL = \$  |              |   |                             |                       |  |
| Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)). + \$   |              |   |                             |                       |  |
| TOTAL NATIONAL FEE = \$1,550   |              |   |                             |                       |  |
| Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property + \$  |              |   |                             |                       |  |
| TOTAL FEES ENCLOSED = \$1,550  |              |   |                             |                       |  |
|  |              |   |                             |                       |  |
| Amount to be refunded: \$  |              |   |                             |                       |  |
| Amount to be charged: \$   |              |   |                             |                       |  |
| a. <input type="checkbox"/> A check in the amount of \$ _____ to cover the above fees is enclosed.   |              |   |                             |                       |  |
| b. <input checked="" type="checkbox"/> Please charge my Deposit Account No. 03-0075 in the amount of \$ 1,550 to cover the above fees.<br>A duplicate copy of this sheet is enclosed.  |              |   |                             |                       |  |
| c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 03-0075. A duplicate copy of this sheet is enclosed.  |              |   |                             |                       |  |
| d. <input type="checkbox"/> Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.  |              |   |                             |                       |  |
| NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b)) must be filed and granted to restore the Application to pending status.   |              |   |                             |                       |  |
| SEND ALL CORRESPONDENCE TO:  |              |   |                             |                       |  |
| Customer No. 03000   |              |   | SIGNATURE<br>David M. Tener |                       |  |
|  |              |   | NAME<br>37,054              |                       |  |
| REGISTRATION NUMBER  |              |   |                             |                       |  |

10/549886

Attny Docket No. B1180/20044  
PTO Customer No. 03000

Applicants : Torsten MÜLLER et al.  
Title : JC17 Rec'd PCT/PTO 16 SEP 2005  
METHODS AND DEVICES FOR SEPARATING  
PARTICLES IN A LIQUID FLOW

The following documents are submitted for the above-identified invention for entry into the U.S. National stage under 35 U.S.C. §371, based on the International Application No. PCT/EP2004/002774, which includes the following:

1. One (1) sheet of Transmittal Letter;
2. Calculation sheet, in duplicate;
3. Application Data Sheet;
4. Preliminary Amendment;
5. Cover sheet of International Publication No. WO 2004/082840;
6. Thirty-three (33) sheets English translation of Application, including 26 sheets Description, 6 sheets Claims and 1 sheet Abstract;
7. Four (4) sheets formal Drawings; and
8. Return Receipt Post Card.

**"Express Mail" Mailing Label No. EL 962 213 040 US  
Date of Deposit September 16, 2005**

I hereby certify that the above-identified documents are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Judy Matos

Judy Matos